



IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Applicant : George Nichols et al. Art Unit : 2643
Serial No. : 09/458,248 Examiner : Suhan Ni
Filed : December 9, 1999
Title : AUTOMOBILE PILLAR ELECTROACOUSTICAL TRANSDUCING

Mail Stop Appeal Brief - Patents

Hon. Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

REPLY BRIEF

I. THE REFERENCE TO UNSPECIFIED GROUNDS OF REJECTION THAT HAVE NOT BEEN WITHDRAWN AND ARE NOT UNDER REVIEW UNDER APPEAL BECAUSE THEY HAVE NOT BEEN PRESENTED FOR REVIEW IN THE APPEAL BRIEF IS NOT UNDERSTOOD.

The Examiner's Answer states:

The following grounds of rejection have not been withdrawn by the examiner, but they are not under review on appeal because they have not been presented for review in the appellant's brief. P. 2.

The statement identifies no ground of rejection that have not been withdrawn by the Examiner that have not been presented for review. Accordingly, all the grounds of rejection set forth in this statement of the issues in the appeal brief are subject to review.

II. DOUG NEWCOMB DOES NOT ANTICIPATE CLAIMS 1-3, 5, 6, 8, 10-14, 16, 17 AND 20-24 BECAUSE THE REFERENCE DOES NOT DISCLOSE EACH AND EVERY ELEMENT IN THE REJECTED CLAIMS ARRANGED AS IN THE CLAIMS.

The Examiner's Answer states:

(i) Claims 1-3, 5-6, 8, 10-14, 16-17 and 20-24 are rejected under 35 U.S.C. 102(a) as being clearly anticipated by Doug Newcomb (Car Stereo, Oct. 1999).

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Regarding claim 1, Newcomb discloses an acoustic assembly (page 23), comprising: an electro-acoustical transducer (tweeter); and an acoustic element (waveguide or grille), separate from said transducer, and structured to improve the acoustic performance of said transducer; and said acoustic assembly designed and constructed to be an element of a vehicle pillar (A-pillar) as claimed.

Regarding claims 2-3, Newcomb further discloses the acoustic assembly, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 5-6, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 8, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23).

Regarding claim 10, Newcomb further discloses the acoustic assembly, wherein the vehicle pillar is an A-pillar (page 23).

Regarding claim 11, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver (tweeter); and an acoustic element (waveguide or grille) as claimed.

Regarding claim 12, Newcomb further discloses the automobile pillar, wherein the vehicle pillar is an A-pillar (page 23).

Regarding claims 13-14, Newcomb further discloses the automobile pillar, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claims 16-17, Newcomb further discloses the automobile pillar, wherein the acoustic assembly has a ported acoustic volume (page 23).

Regarding claim 20, Newcomb discloses an acoustic assembly (page 23), comprising: an electroacoustical transducer (Figs.); and an acoustic element (wave guide or grille), separate from said transducer, and structured to improve the acoustic performance of said electroacoustical transducer as claimed.

Regarding claim 21, Newcomb discloses a trim element for covering a vehicle pillar, said trim element forming an acoustic assembly (page 23).

Regarding claim 22, Newcomb further discloses the trim element, wherein the acoustic element is a two-ended waveguide (page 23).

Regarding claim 23, Newcomb further discloses the trim element, wherein the acoustic assembly is an acoustic volume (page 23).

Regarding claim 24, Newcomb further discloses the trim element, wherein the vehicle pillar is an A-pillar (page 23). Pp. 3-4.

Applicant's arguments dated 01/12/2004 have been fully considered, but they are not deemed to be persuasive.

The cited reference (Doug Newcomb, Car Stereo, Oct. 1999) does clearly show all the limitation as claimed. For example:

Regarding claim 1, Newcomb discloses an acoustic assembly (Figure below from page 23), comprising: an electro-acoustical transducer (tweeter); and an acoustic element (waveguide or grille), separate from said transducer, and

structured to improve the acoustic performance (sending acoustic output to different direction or making the assembly more durable) of said transducer; and said acoustic assembly designed and constructed to be an element of a vehicle pillar (A-pillar) as claimed.

The applicant argues: "there is no disclosure of the waveguide being an acoustic element separate from the electroacoustical transducer" and the examiner respectfully disagrees with the applicant. An average skilled person in the art will clearly understand that a waveguide or grille is structured and capable of improve the acoustic performance, such as propagating acoustic output into desirable direction, and/or filtering the acoustic output, so that they both can be considered as an acoustic element. Furthermore, the disclosed tweeter is a commonly commercially available high-frequency speaker (T3X tweeter, col. 3, Hne8 of page 23) and **"a third ABS piece, the frame for the grill, sits on top of the trim ring and is held in place by each tweeter's build-in waveguides"** (col. 3, lines 16-21 of page 23). Therefore, it clearly indicates that the acoustic element, the grille is separate from the transducer (tweeter) as claimed in the application.

Regarding claim 25, Atkinson discloses an automobile pillar (Fig. 1, pillar – upright support for a superstructure) comprising a plurality of sound sources (11, 15, 20). The venting holes (15, 20) are balancing acoustic pressure and emitting sound (as sound sources) as well.

Regarding claim 11, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver (tweeter); and an acoustic element (waveguide or grille) as claimed.

Regarding claims 4, 7, 9 15, 18-19, 26 and 28, the applicants argue no secondary references to teach the missing limitation, which has been taught by an official notice by the examiner. The examiner newly cited several US patents for the support of the official notices.

All newly cited references teach plurality types of waveguides and Yanagawa (U. S. Pat. 4,509,184) further teaches a second transducer as claimed. Furthermore, the applicants argue no motivation to combine the references. The motivation has been clearly included in the rejection and it is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. **In re Sheckler, 168 USPQ 716 (CCPA 1971); In re Mlaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 715 (CCPA 1968).** Pp. 7-9.

We stand on the authorities and position in our Appeal Brief. Pp. 5-7.

III. ATKINSON DOES NOT ANTICIPATE CLAIMS 25, 27 AND 29 BECAUSE THE REFERENCE FAILS TO DISCLOSE EACH AND EVERY ELEMENT IN EACH OF THESE CLAIMS ARRANGED AS IN THE CLAIMS INCLUDING THE AUTOMOBILE PILLAR.

The Examiner's Answer states:

(ii) Claims 25, 27 and 29 are rejected under 35 U.S.C. 102(b) as being clearly anticipated by Atkinson (U.S. Pat. -1,930,577).

Regarding claim 25, Atkinson discloses an automobile pillar (Fig. 1) comprising a plurality of sound sources (11, 15, 20).

Regarding claim 27, Atkinson further discloses the automobile pillar, wherein a first of the sound sources comprises a first electroacoustic transducer (11) and a second of the sound sources comprises a port opening (15, 20) as claimed. Pp. 4-5.

...

Regarding claim 25, Atkinson discloses an automobile pillar (Fig. 1, pillar – upright support for a superstructure) comprising a plurality of sound sources (11, 15, 20). The venting holes (15, 20) are balancing acoustic pressure and emitting sound (as sound sources) as well. P.8.

We stand on the position in our Appeal Brief. P.8.

IV. CLAIMS 4, 7, 9, 15, 18 AND 19 MEET THE CONDITIONS FOR PATENTABILITY UNDER SECTION 103 AT LEAST BECAUSE NEWCOMB FAILS TO SUGGEST THE DESIRABILITY OF MODIFYING WHAT IS THERE DISCLOSED TO MEET THE TERMS OF THESE REJECTED CLAIMS.

The Examiner's Answer states:

(i) Claims 4, 7, 9, 15 and 18-19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Doug Newcomb (Car Stereo, Oct. 1999).

Regarding claim 4, Newcomb does not clearly show that the acoustic element is a singleended waveguide as claimed. Since providing a single-ended waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claims 7 and 9, Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 15, Newcomb does not clearly show that the acoustic element is a single- ended waveguide as claimed. Since providing a single-ended

waveguide for an acoustic transducer is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide the single-ended waveguide for the acoustic assembly, in order to provide an acoustic assembly having more directional sound features.

Regarding claim 18, Newcomb discloses a structural automobile pillar containing an acoustic assembly (page 23), said acoustic assembly comprising: an electro-acoustical driver; and an acoustic element, wherein the pillar is an A-pillar (page 23), and the acoustic assembly is a ported acoustic volume (page 23). But Newcomb does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide a multi-channel surrounding sound for users.

Regarding claim 19, Newcomb further discloses the acoustic assembly, wherein the acoustic assembly has a sealed acoustic volume (page 23). Pp. 5-6.

Regarding claims 4, 7, 9 15, 18-19, 26 and 28, the applicants argue no secondary references to teach the missing limitation, which has been taught by an official notice by the examiner. The examiner newly cited several US patents for the support of the official notices.

All newly cited references teach plurality types of waveguides and Yanagawa (U. S. Pat. 4,509,184) further teaches a second transducer as claimed. Furthermore, the applicants argue no motivation to combine the references. The motivation has been clearly included in the rejection and it is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. **In re Sheckler, 168 USPQ 716 (CCPA 1971); In re Mlaughlin 170 USPQ 209 (CCPA 1971); In re Young 159 USPQ 715 (CCPA 1968).** Pp. 8-9.

We stand on the authorities and reasoning in our Appeal Brief. Pp. 9-10.

We take this occasion to explain what precedents are considered binding in proceedings in the Patent and Trademark Office (PTO). Where the Court of Appeals for the Federal Circuit has addressed a point of law in a published opinion, the Federal Circuit's decision is controlling. Similarly controlling are decisions considered to be binding precedent by the Federal Circuit, i.e., decisions of the former Court of Claims and the former Court of Customs and Patent Appeals, as well as the former Customs Court. See *South Corp. v. United States*, 690 F.2d 1368, 215 USPQ 657 (Fed. Cir. 1982)(in banc); *Bar Zell Expeditors, Inc. v. United States*, 698 F.2d 1210, 1211 n. 4 (Fed. Cir. 1983). In those relatively rare cases where the Federal Circuit has not addressed an issue, but

there is "authorized published" Board precedent, that published Board precedent is binding on panels of the Board and Examiners in the Patent Examining Corps. *Ex parte Holt*, 19 U.S.P.Q. 2d 1211, 1214 (BPA&I 1991).

Instead of relying on the authorities of the Federal Circuit Court of Appeals cited in our brief which are binding on the PTO, none of which were mentioned in the Examiner's Answer, the Examiner relies on three cases which we distinguished in our Appeal Brief. P. 11.

V. CLAIMS 26 AND 28 MEET THE CONDITIONS FOR PATENTABILITY UNDER SECTION 103(a) AT LEAST BECAUSE ATKINSON FAILS TO SUGGEST THE DESIRABILITY OF MODIFYING WHAT IS THERE DISCLOSED TO MEET THE TERMS OF THESE CLAIMS.

The Examiner's Answer states:

(ii) Claim 26 and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Atkinson

(U.S.Pat.- 1,930,577).

Regarding claims 26 and 28, Atkinson does not clearly show a second electroacoustical transducer as claimed. Since providing more than one speaker for an acoustic assembly is well known in the art, it therefore would have been obvious to one skilled in the art at the time the invention was made to provide a desirable number of speakers, such as two for the acoustic assembly, in order to provide an acoustic assembly with desirable frequency coverage range. Pp. 6-7.

Regarding claims 4, 7, 9 15, 18-19, 26 and 28, the applicants argue no secondary references to teach the missing limitation, which has been taught by an official notice by the examiner. The examiner newly cited several US patents for the support of the official notices.

All newly cited references teach plurality types of waveguides and Yanagawa (U. S. Pat. 4,509,184) further teaches a second transducer as claimed. Furthermore, the applicants argue no motivation to combine the references. The motivation has been clearly included in the rejection and it is not necessary that the references actually suggest, expressly or in so many words the changes or improvements that applicants have made. The test for combining references is what the references as whole would have suggested to one of ordinary skilled in the art. **In re Sheckler**, 168 USPQ 716 (CCPA 1971); **In re Mlaughlin** 170 USPQ 209 (CCPA 1971); **In re Young** 159 USPQ 715 (CCPA 1968). Pp. 8-9.

We stand on the position in our Appeal Brief. Pp. 10-11.

CONCLUSION

In view of the forgoing authorities, reasoning and that set forth in our Appeal Brief and the inability of the prior art, alone or in combination, to anticipate, suggest or make obvious the subject matter as a whole of the invention disclosed in this application, the decision of the Examiner finally rejecting claims 1-19 should be reversed. Should the Board be of the opinion that a claim may be allowed in amended form, the Board is respectfully requested to include and explicit statement that such claim may be allowed in such amended form and direct that appellant shall have the right to amend in conformity with such statement in the absence of new references or grounds of rejection.

The commissioner is authorized to apply any charges or credits to Deposit Account No. 06-1050, Order No. 02103-365001.

Respectfully submitted,
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